

POSITIONS AND AREAS OF SUN SPOTS—Continued

MEAN DAILY AREA FOR 30 DAYS, 812—Continued

Date	East- ern stand- ard time	Heliographic			Area		Total area for each day	Observatory
		Diff. in longi- tude	Longi- tude	Lat- itude	Spot	Group		
1936	<i>h m</i>	<i>°</i>	<i>°</i>	<i>°</i>				
Apr. 26.....	14 40	-26.0	257.3	+37.0	-----	12	-----	Mt. Wilson.
		+5.0	288.3	+36.0	-----	14	-----	
		+5.0	288.3	+12.0	-----	19	-----	
		+23.0	306.3	-16.0	-----	15	-----	
		+51.0	334.3	-26.0	-----	197	-----	
		+57.5	340.8	-13.0	17	-----	-----	
		+58.0	341.3	-12.0	-----	125	-----	
		+68.0	351.3	-18.0	185	-----	584	
Apr. 27.....	13 50	-16.0	254.6	+36.0	-----	16	-----	Do.
		+19.0	289.6	+13.0	-----	35	-----	
		+35.0	305.6	-16.0	-----	9	-----	
		+64.0	334.6	-26.0	-----	226	-----	
		+68.0	338.6	-13.0	23	-----	-----	
		+68.0	338.6	-10.0	25	-----	-----	
		+79.0	349.6	-18.0	227	-----	561	
Apr. 28.....	11 44	+33.0	291.5	+12.0	-----	46	-----	U. S. Naval.
		+74.0	332.5	-26.0	46	-----	-----	
		+87.0	345.5	-27.0	62	-----	154	
Apr. 29.....	11 6	-68.0	177.6	-18.0	-----	77	-----	Do.
		+50.0	295.6	+12.0	15	-----	92	
Apr. 30.....	11 13	-54.0	178.3	-18.0	-----	46	46	Do.

PROVISIONAL SUN-SPOT RELATIVE NUMBERS,
APRIL 1936

[Dependent alone on observations at Zurich and its station at Arosa]

[Data furnished through the courtesy of Prof. W. Brunner, Eidgen. Sternwarte, Zurich, Switzerland]

April 1936	Relative numbers	April 1936	Relative numbers	April 1936	Relative numbers
1-----	<i>Wac93</i>	11	<i>a91</i>	21	<i>a67</i>
2-----	100	12	<i>Ec92</i>	22	<i>a49</i>
3-----	<i>a91</i>	13	<i>a83</i>	23	56
4-----	<i>Ec74</i>	14	86	24	<i>Ec53</i>
5-----	85	15	<i>a73</i>	25	<i>Wc72</i>
6-----	<i>d91</i>	16	<i>ad88</i>	26	77
7-----	<i>b—</i>	17	—	27	56?
8-----	<i>b76</i>	18	73	28	—
9-----	<i>d89</i>	19	83	29	32
10-----	99	20	75	30	—

Mean, 26 days=77.1.

a= Passage of an average-sized group through the central meridian.*b*= Passage of a large group or spot through the central meridian.*c*= New formation of a center of activity: *E*, on the eastern part of the sun's disk; *W*, on the western part; *M*, in the central circle.*d*= Entrance of a large or average-sized center of activity on the east limb.

AEROLOGICAL OBSERVATIONS

[Aerological Division, D. M. LITTLE in charge]

By L. T. SAMUELS

At those stations with a sufficient period of record for the determination of approximate normals, upper-air temperatures during April averaged below normal except over San Diego where the departures were positive. (See table 1.) In practically all cases the departures were of moderate to small magnitude.

Upper-air relative humidity departures were mostly of opposite sign to those for temperature, and of small to moderate magnitude. The comparatively pronounced

increase in the mean relative humidity with elevation found at El Paso is characteristic of the approach of the warm season.

The directions of the upper-air wind resultants were close to normal at the 3-kilometer level. (See table 2.) Resultant velocities at that level exceeded the normals over the northern half and southeastern section of the country, and were below normal elsewhere. Departures were of small to moderate magnitude.